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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,218

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Richard D. Dettinger

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EXAMINER

EBIRIM, EMEKA

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/718,218	DETTINGER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Emeka Ebirim	2166	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☒ Claim(s) 5, 9, 24, 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/20/03, 10/26/04</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Status***

1. Claims 1 – 41 are pending in this Office action.

The application has been examined. Claims 1 – 41 are rejected as detailed below and are pending in this office action.

### ***Claim Objections***

2. Claims 5, 9, 24, 28 are objected to because of the following informalities: The claims contain acronyms which can lead to multiple interpretations.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. To be statutory, a claimed computer-related process must either: (A) result in a physical transformation outside the computer for which a practical application is either disclosed in the specification or would have been known to a skilled artisan, or (B) be limited to a practical application with useful, concrete and tangible result.

5. Claims 20 – 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 20 – 38 are not limited to tangible embodiments. In view of Applicants' disclosure, specification page 7, paragraph 0029, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., [CD-ROM]) and intangible embodiments (e.g., [wireless communications]).

As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-4, 6-8, 10-23, 25-27, 29-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Patent No: 6,026,388 to Liddy et al (hereinafter Liddy).

**Claim 1.**

Liddy discloses:

A method of providing natural language support for users running queries against a database, comprising [natural language, queries, See Liddy Col 2 lines 35-40, Fig 3]:

providing a data abstraction model comprising a plurality of logical fields abstractly describing physical data residing in the database [fields, See Liddy Col 9 lines 24-30, Co 5 lines 13-16, Fig 3]; and

associating the data abstraction model with a language resource component defining a natural language expression for each of the plurality of logical fields [matched (associated) with the relevant document database (resource), See Liddy Col 2 lines 63-63, Fig 3].

Claim 2.

Liddy discloses the elements of claim 1 on as above and furthermore it discloses displaying, to a user, at least a portion of the data abstraction model in accordance with the natural language expression defined by the language resource component [Graphical User Interface, Col 27 lines 6-18, Fig 2, Fig 10-20].

Claim 3.

Liddy discloses the elements of claim 1 as above and furthermore it discloses creating the language resource component for the data abstraction model, the creating comprising mapping a default value to each logical field of the plurality of logical fields [default tag (default value), matching (mapping), Col 17 lines 59-61, Col 15 lines 53-55].

Claim 4.

Liddy discloses the elements of claim 1 as above and furthermore it discloses wherein the associating comprises:

generating, in the data abstraction model, a reference to the language resource component to associate the data abstraction model with the language resource component [associate (match), Col 21 lines 21-25].

Claim 6.

Liddy discloses:

A method of providing natural language support for users running queries against a database, comprising [natural language, queries, See Liddy Col 2 lines 35-40, Fig 3]:

providing a data abstraction model comprising a plurality of logical fields abstractly describing physical data residing in the database fields, See Liddy Col 9 lines 24-30, Co 5 lines 13-16, Fig 3]; and

providing translation information for the data abstraction model describing translations of each of the plurality of logical fields from a first natural language expression to a second natural language expression [alternative representations of documents and queries; documents of supported languages See Liddy Col 3 lines 5-15, Col 5 lines 17-21].

Claim 7.

Liddy discloses the elements of claim 6 as above and furthermore it discloses wherein the first and second natural language expressions are two different languages [alternative representations of documents and queries; documents of supported languages See Liddy Col 3 lines 5-15, Col 5 lines 17-21].

Claim 8.

Liddy discloses the elements of claim 6 as above and furthermore it discloses wherein the first and second natural language expressions are two different variations on the same language [alternative representations of documents and queries; re-express; documents of supported languages See Liddy Col 3 lines 5-15, Col 5 lines 17-21].

Claim 10.

Liddy discloses the elements of claim 6 as above and furthermore it discloses wherein the data abstraction model further comprises a reference to at least a portion of the translation information [associate (match), Col 21 lines 21-25].

Claim 11.

Liddy discloses the elements of claim 10 as above and furthermore it discloses wherein the referenced portion is a default file [default , folder (file), See Liddy Col 33 lines 19-21].

Claim 12.

Liddy discloses the elements of claim 6 as above and furthermore it discloses wherein providing translation information comprises successively loading language resource files, wherein each successive language resource file comprises translations

of increasing specificity to replace relatively less specific translations of one or more previously loaded language resource files [rank order (increasing specificity), relative strength, Documents, folders, Col 34 lines 1-6].

Claim 13.

Liddy discloses the elements of claim 6 as above and furthermore it discloses wherein the translation information further describes translations of each of the plurality of logical fields from the first natural language expression to a third natural language expression, and further comprising [alternative representations of documents and queries; documents of supported languages See Liddy Col 3 lines 5-15, Col 5 lines 17-21, Col 9 lines 24-27]:

displaying, to a user, at least a portion of the data abstraction model using only one of the first natural language expression, the second natural language expression and the third natural language expression [Graphical User Interface, Col 27 lines 6-18, Fig 2, Fig 10-20].

Claim14.

Liddy discloses the elements of claim 13 as above and furthermore it discloses wherein which language expression is used to display the portion of the data abstraction model is based on user parameters [Graphical User Interface, Col 27 lines 6-18, Fig 2, Fig 10-20].



Claim 15.

Liddy discloses the elements of claim 14 as above and furthermore it discloses wherein the user parameters describe a context of the user [user, concept, Col 4 lines 3-5].

Claim 16.

Liddy discloses the elements of claim 6 as above and furthermore it discloses retrieving an abstract query expressed in the first natural language expression [natural language, queries, See Liddy Col 2 lines 35-40, Fig 3];

translating the abstract query on the basis of the translation information to express the abstract query in the second natural language expression [alternative representations of documents and queries; documents of supported languages See Liddy Col 3 lines 5-15, Col 5 lines 17-21].

; and

displaying the abstract query expressed in the second natural language expression [Graphical User Interface, Col 27 lines 6-18, Fig 2, Fig 10-20].

Claim 17.

Liddy discloses:

A method of providing natural language support for users running queries against a database, comprising [natural language, queries, See Liddy Col 2 lines 35-40, Fig 3]:

retrieving an abstract query comprising a plurality of logical fields, each corresponding to a logical field specification of a data abstraction model abstractly describing physical data residing in the database [logical representation, query, See Liddy Col 19 lines 23-29];

determining, from the data abstraction model, an associated language resource component [matching (associated), See Liddy Col 21 lines 22-24, 52-54];

determining, from the associated language resource component, a natural language expression for the plurality of logical fields of the abstract query [See Liddy Col 21 lines 22-24, 52-54, Col 8 lines 30-40]; and

displaying the abstract query in the determined natural language expression [Graphical User Interface, Col 27 lines 6-18, Fig 2, Fig 10-20].

#### Claim 18.

Liddy discloses the elements of claim 17 as above and furthermore it discloses prior to displaying, translating the abstract query from another natural language expression in which the initially written [See Liddy Col 18 lines 49-55, Col 8 lines 30-40].

#### Claim 19.

Liddy discloses the elements of claim 17 as above and furthermore it discloses wherein the associated language resource component is a language resource file, the data abstraction model including a reference to the language resource file [See Liddy Col 7 lines 42-50].

Claim 39.

Liddy discloses:

A computer system, comprising:

a database having data [database, Col 2 lines 62-65]; and

a natural language support manager residing in memory for providing natural language support for users running queries against the data of the database, the natural language support manager being configured for [manage, query, database, Col 32 lines 36-45]:

retrieving a data abstraction model comprising a plurality of logical fields abstractly describing physical data residing in the database [fields, See Liddy Col 9 lines 24-30, Co 5 lines 13-16, Fig 3]; and

associating the data abstraction model with a language resource component defining a natural language expression for each of the plurality of logical fields [matched (associated) with the relevant document database (resource), See Liddy Col 2 lines 63-63, Fig 3].

Claim 40.

Liddy discloses:

A computer system, comprising:

a database having data [database, Col 2 lines 62-65]; and

a natural language support manager residing in memory for providing natural language support for users running queries against the data of the database, the natural language support manager being configured for [manage, query, database, Col 32 lines 36-45]:

retrieving a data abstraction model comprising a plurality of logical fields abstractly describing physical data residing in the database [fields, See Liddy Col 9 lines 24-30, Co 5 lines 13-16, Fig 3]; and

retrieving translation information for the data abstraction model describing translations of each of the plurality of logical fields from a first natural language expression to a second natural language expression.

Claim 41.

Liddy discloses:

A computer system, comprising:

a database having data [database, Col 2 lines 62-65]; and

a natural language support manager residing in memory for providing natural language support for users running queries against the data of the database, the natural language support manager being configured for [manage, query, database, Col 32 lines 36-45]:

retrieving an abstract query comprising a plurality of logical fields, each corresponding to a logical field specification of a data abstraction model abstractly

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describing physical data residing in the database [fields, See Liddy Col 9 lines 24-30, Co 5 lines 13-16, Fig 3];

determining, from the data abstraction model, an associated language resource component [matching (associated), See Liddy Col 21 lines 22-24, 52-54];

determining, from the associated language resource component, a natural language expression for the plurality of logical fields of the abstract query [See Liddy Col 21 lines 22-24, 52-54, Col 8 lines 30-40]; and

displaying the abstract query in the determined natural language expression [Graphical User Interface, Col 27 lines 6-18, Fig 2, Fig 10-20].

8. Subject matter of claims 20 – 23, 25 – 27, 28 – 31, 32 – 38 are rejected in the analysis above in claims 1 – 4, 6 – 8, 10 – 19 and these claims are rejected on that basis.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 5, 9, 24, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liddy in view of Pub No: 2004/0046789 to Inanoria (hereinafter Inanoria).

Claim 5.

Liddy discloses the elements of claim 4 as above but it does not explicitly indicate "XLIFF". Inanoria discloses the claimed XLIFF [Inanoria paragraph 0164].

It would have been obvious to one of ordinary skill in the art data processing at the time of the invention to combine the cited references because XLIFF as disclosed by Inanoria would have enabled Liddy to easily use and manage multi-lingual characters [Inanoria paragraph 0164].

Furthermore XLIFF would serve Liddy in storing data in XML files for conformity with the industrial standard [Inanoria paragraph 0164].

Claim 9.

Liddy discloses the elements of claim 6 as above but it does not explicitly indicate "XLIFF". Inanoria discloses the claimed XLIFF [Inanoria paragraph 0164].

It would have been obvious to one of ordinary skill in the art data processing at the time of the invention to combine the cited references because XLIFF as disclosed by Inanoria would have enabled Liddy to easily use and manage multi-lingual characters [Inanoria paragraph 0164].

Furthermore XLIFF would serve Liddy in storing data in XML files for conformity with the industrial standard [Inanoria paragraph 0164].

12. Subject matter of claims 24, 28 are rejected in the analysis above in claims 5, 9 and these claims are rejected on that basis.

***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emeka Ebirim whose telephone number is 571-272-3994. The examiner can normally be reached on 8:30pm - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam, can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emeka Ebirim  
Examiner  
Art Unit 2166

June 02 , 2006

  
**KHANH B. PHAM**  
**PRIMARY EXAMINER**